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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,407	07/18/2003	Jin-Sheng Gong	REAP0017USA	1406
27765	7590	10/04/2005	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			WU, XIAO MIN	
			ART UNIT	PAPER NUMBER
			2674	
DATE MAILED: 10/04/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/604,407		GONG ET AL.	
	Examiner		Art Unit	
	XIAO M. WU		2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of “devicecan”, in claim 18, line 8, is indefinite and it should be –device can--.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 6-11, 15-18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Loveridge et al. (US Patent No. 6,545,688).

As to claim 1, Loveridge discloses a method of frame synchronization for converting a source frame signal (101, Fig. 1A) to a destination frame signal (148, Fig. 1A), wherein the source frame signal is received at a first frame rate (e.g. the source frame rate is F), the

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destination frame signal includes a plurality of horizontal lines and each of the horizontal lines includes a plurality of pixel data (see col. 6, lines 33-34), the method comprising the following steps: outputting the destination frame signal according to the source frame signal (e.g. F, see col.6, lines 25-64), wherein the destination frame signal is output at a second frame rate; and adjusting the number of the pixel data of at least one of the horizontal lines (see 260, Fig. 2) such that the first frame rate and the second frame rate are substantially the same (see 270, Fig. 2 and col. 6, lines 65-67).

As to claims 2, 10, Loveridge discloses that the resolution of the source frame signal and the resolution of the destination frame signal are different (see 260, 270, Fig. 2).

As to claims 6, 15, Loveridge discloses that the step of adjusting the number of the pixel data is executed by increasing the number of the pixel data to prevent underflow or by decreasing the number of the pixel data to prevent overflow (e.g. the scale circuit can resize the image by adjusting either vertical or horizontal lines, see col. 7, lines 26-44).

As to claims 7, 16, Loveridge discloses that adjusting the number of the pixel data is executed by increasing the number of the pixel data when the second frame rate is faster than the first frame rate or by decreasing the number of the pixel data when the second frame rate is slower than the first frame rate (see the equations (1) to (6) as shown in col. 6).

As to claims 8, 17, 20, Loveridge discloses the horizontal lines further include a last horizontal line defined by a last horizontal sync signal and a vertical sync signal, the method further comprising the following step: adjusting the number of the pixel data of the last horizontal line according to the last horizontal sync signal and the vertical sync signal (see Fig. 3 and col. 9, lines 17-63).

As to claims 9, 18, Loveridge discloses an apparatus for converting a source frame signal (101, Fig. 1A) to a destination frame signal (148, Fig. 1A), wherein the source frame signal is received at a first frame rate (e.g. F) and the destination frame signal is output at a second frame rate, the destination frame signal includes a plurality of horizontal lines, each of the horizontal lines includes a plurality of pixel data (see col. 6, lines 33-34), the apparatus comprising: a buffer (120, Fig. 1B) for storing at least a part of the pixel data; and a converter (140, Fig. 1A) for adjusting the number of the pixel data of at least one of the horizontal lines such that the first frame rate and the second frame rate are substantially the same (see 260, 270, Fig. 2).

As to claim 11, Loveridge discloses the memory 120 for storing pixel data. It is well known in the art to have different size of the memory for storing pixel data such as using a line buffer for storing data for one horizontal line,

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 3-5, 12-14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loveridge et al. (US Patent No. 6,545,688) in view of McKay et al. (US Patent No. 6,313,822).

It is noted that Loveridge does not disclose the pixel data of each of the horizontal lines further includes a plurality of pixel signals and a plurality of porch signals and when adjusting the number of the pixel data, the number of the porch signals is adjusted. However, using a plurality of porch signal (e.g. front porch and back porch signals) for adjusting the number of the pixels of the horizontal line is well known in the art such as taught by McKay (see col. 3, lines 26-31). It would have been obvious to one of ordinary skill in the art to have modified Loveridge with the features of using porch signals for controlling the pixel number as taught by McKay so that the size of the image can be controlled

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US 5,448,257, 6,177,922, 6,181,300, 6,686,894 and 2005/0012738 are cited to teach an image size control device.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO M. WU whose telephone number is 571-272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PATRICK EDOUARD, can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

X.W.

September 23, 2005



XIAO M. WU
Primary Examiner
Art Unit 2674